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REMARKS

Entry of this Response is believed proper since no new issues are being raised which would require the Examiner's further consideration and/or search.

Claims 1-28 are presently pending in this application. Claim 9 has been amended to more particularly define the claimed invention.

It is noted that the amendments are made only to more particularly define the invention and not for distinguishing the invention over the prior art, for narrowing the scope of the claims, or for any reason related to a statutory requirement for patentability. It is further noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Applicant gratefully acknowledges the Examiner's indication that claims 3, 6-8, 11, 14-16, 19, 22-24 and 28 would be allowable if rewritten in independent form. However, Applicant submits that all of the claims are allowable.

Claims 1-2, 4-5, 9-10, 12-13, 17-18, 20-21 and 25-27 stand rejected under 35 U.S.C. §103(a) as being obvious over Applicant's Admitted Prior Art, pages 1-7, and Fig. 1, further in view of Hiroaki, JP 2001-358753 and Masanobu, JP 2001-184240.

This rejection is respectfully traversed in view of the following discussion.

I. APPLICANT'S CLAIMED INVENTION

The claimed invention (as defined, for example, by independent claim 1) is directed to an apparatus for memory capacity including a data capacity management means that manages data capacity of remote mobile terminals that communicate with each other via a network. A

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transmission judging means judges, in response to a request for data from a network and a vacant storage capacity of a memory issued from a remote mobile terminal, whether the requested data is to be transmitted to the remote mobile terminal by comparing the vacant storage capacity of the remote mobile terminal, which is managed by the data capacity management means, with the amount of the data to be transmitted to the remote mobile terminal. Furthermore, a transmitting means that obtains some data for storing in the remote mobile terminal and stores the obtained data and causes the remote mobile terminal to make a new vacant storage capacity when the data to be transmitted were judged not to be transmitted, and transmits the data to be transmitted, which were judged not to be transmitted, to the remote mobile terminal by using the new vacant storage capacity.

Conventionally, at a mobile terminal, the data from the external communication instrument are received and stored in a memorizing section including a fixed memory capacity, and consequently, data exceeding the fixed memory capacity cannot be received and stored. In order to obtain additional data, whose size is larger than the vacant capacity of the memorizing section, a user selects some data stored in the memorizing section and deletes the selected data, thereby securing a vacant capacity for the receiving data. (Specification at page 4, lines 13-24.)

The claimed invention (e.g., as recited in claims 1, 4, 9, 12, 17 and 20), on the other hand, includes *a transmission judging means that judges, in response to a request for data and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said requested data is to be transmitted to said remote mobile terminal by comparing said vacant storage capacity of said remote mobile terminal, and "a management server that transmits data, wherein at least one of said plurality of remote mobile terminals requests said*

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management server to obtain data from said network, for transmission to said remote mobile terminal" (as recited in claims 25 and 26).

(Application at Fig. 2, page 22 line 16 to page 23, line 28). This feature is important for the management apparatus to remotely judge whether there is sufficient memory capacity in the mobile terminal available for receiving requested data from the management apparatus, (Application at page 19, line 20 to page 20, line 10).

II. THE ALLEGED PRIOR ART REJECTIONS

A. 35 U.S.C. § 103(a) Rejection over Applicant's Admitted Prior Art, pages 1-7, and Fig. 1 further in view of Hiroaki, JP 2001-358753 and Masanobu, JP 2001-184240

The Examiner alleges that Applicant's Admitted Prior Art, pages 1-7, and Fig. 1, (AAPA), further in view of Hiroaki, JP 2001-358753 and Masanobu, JP 2001-184240, (Hiroaki and Masanobu), teaches the invention of claims 1-2, 4-5, 9-10, 12-13, 17-18, 20-21 and 25-27.

Applicant submits, however, that the Examiner failed to address in the Office Action, and AAPA further in view of Hiroaki and Masanobu does not teach or suggest, "a transmission judging means that judges, in response to a request for data and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said requested data is to be transmitted to said remote mobile terminal by comparing said vacant storage capacity of said remote mobile terminal."

B. Applicant's Admitted Prior Art, pages 1-7, and Fig. 1

The Examiner in the Office Action states that Fig. 1 of Applicant's drawings and the following sections in AAPA disclose a mobile terminal with a memory section and manual

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memory allocation and deallocation.

The memorizing section 124 stores the transmitting data and the received data. As the memorizing section 124, for example, a memory such as a ROM(s), a RAM(s), an IC card, a memory card, a memory card having a copyright protection function, and a disk unit can be used. (Page 3, lines 8-12.)

In order to obtain data, whose amount is larger than the vacant capacity of the memorizing section 124, the user selects some data storing in the memorizing section 124, whose importance is little. And the user deletes the selected data in the memorizing section 124, and secures the vacant capacity for the receiving data. That is, this operation is necessary for the user to obtain the data. (Page 4, lines 20-24.)

However, nowhere in AAPA or the above-mentioned sections is there any teaching or suggestion of, "a transmission judging means that judges, in response to a request for data and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said requested data is to be transmitted to said remote mobile terminal by comparing said vacant storage capacity of said remote mobile terminal."

C. Hiroaki, JP 2001-358753

The Examiner in the Office Action states that the following sections in AAPA disclose a server.

As the second conventional technology, Japanese Patent Application Laid-Open No. 2001-358753 discloses a data storing method at a mobile terminal. In this patent application, in order to store a large amount of data, a Web server is utilized as a large capacity memory. (Page 5, lines 10-14.)

At the second conventional technology, when the user of the mobile terminal desires to obtain some data whose amount is large, the user requires the Web server to store the data in the storage of the Web server. After this, the user accesses the Web server and obtains the data storing in the Web server. However, the second conventional technology discloses only the data storing concept in the storage of the Web server, and does not describe vacant capacity in the mobile terminal and the amount of data that the user desired to obtain. At the second conventional technology, when the user of the mobile terminal requested to store some data in the Web server, the Web server stores the data,

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and when the user desires to obtain the data, the Web server downloads the data to the mobile terminal. Consequently, the second conventional technology does not teach any method to compare the vacant capacity in the mobile terminal with the amount of data that the user of the mobile terminal desires to obtain. And there is no method comparing the vacant capacity in the mobile terminal with the amount of data that the user of the mobile terminal desires to obtain. (Emphasis added.) (Page 6, lines 5-22.)

Hiroaki further discloses with respect to the communication terminal 100 requesting to upload data information:

[0019]...The communication terminal 100 which receives communication service in the communication link service area 101 performs connection processing to an access point 103 to a base transceiver station 102, in case it connects with an access point 103. It becomes possible by connecting a base transceiver station 102 to an access point 103 through the wireless base generalization station 104, the generalization station 105, and the terminal office 106 to communicate with a communication terminal 100. If a upload demand of data information is performed from a communication terminal 100 to an access point 103, the communication system Management Department 107 will perform actuation for accumulating information over Web server 108, and will notify upload authorization to a communication terminal 100.
[0020] A communication terminal 100 will upload information, such as text to save, image information, or speech information, to an access point 103, if advice of preservation authorization is received. The communication system Management Department 107 which is performing communication management of an access point 103 accumulates and saves data information, such as uploaded text, image information, and speech information, to Web server 108. (Emphasis added.)

[0024] Next, with reference to drawing 2, the data store method of the communication terminal in the embodiment of operation of the 2nd of this invention is explained. If a user performs actuation for making upload connection from the voice input means 210 or the external input means 212 to an access point 103 A connection-request signal is transmitted to a base transceiver station 102 through a control section 203, the wireless section 202, and an antenna 201 from a communication terminal 200. Like the case of the embodiment of the 1st operation, a communication terminal 200 is connected to an access point 103, and the communication system Management Department 107 performs actuation for accumulating information over Web server 108, and notifies upload authorization to a communication terminal 200.

[0025] A communication terminal 200 uploads the speech information inputted from the image information inputted from the text inputted from the

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input means 207 or the external input means 212, the image input means 206, or the external image input means 214, the voice input means 210, or the external voice input means 217 from the communication system Management Department 107 to Web server 108 through an access point 103 through a control section 203, the wireless section 202, and an antenna 201. (Emphasis added.)

Furthermore, Hiroaki discloses with respect to the communication terminal 100 requesting to download data information:

[0021] When taking out text, image information, speech information, etc. which were saved, connection processing to an access point 103 is performed from a communication terminal 100 to a base transceiver station 102. A communication terminal 100 requires download of data information from an access point 103, after connecting with an access point 103. The communication system Management Department 107 downloads the information accumulated in Web server 108 by the demand of an access point 103 to a communication terminal 100. Thus, when it stores temporarily and uses information, Web server 108 will have a function as a temporary memory of downloading and using it for a communication terminal 100, while having a function as large capacity storage of a communication terminal 100. (Emphasis added.)

[0025]... Moreover, when downloading data information, such as text, image information, or speech information, from Web server 108, if a connection request is performed from a communication terminal 200 to an access point 103 and advice of connection authorization is received like the case of the upload to Web server 108, recording information will be retrieved and the information for which it wishes will be downloaded from Web server 108 by the communication system Management Department 107. (Emphasis added.)

Additionally, Hiroaki discloses in paragraph 27 that control section 203 judges whether the storage region of the communication terminal 100 can store any additional data. The control section 203 of the communication terminal 100 can then choose web server 108 automatically via the control section 203 or by a user's request to save data to the web server 108.

[0027] Moreover, when it judges that a storage region required for the preservation is not securable, the control section 203 of a communication terminal 100 can choose Web server 108 automatically by a user's arbitrary selections or the control section 203, and can make data information save,

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when saving data information.

However, nowhere in AAPA discussion in the Specification regarding Hiroaki, or the above-mentioned sections of Hiroaki is there any teaching or suggestion of, *"a management apparatus for managing memory capacity, (independent of a remote mobile terminal), comprising...a transmission judging means that judges, in response to a request for data and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said requested data is to be transmitted to said remote mobile terminal by comparing said vacant storage capacity of said remote mobile terminal."* Hiroaki teaches that the control section 203 is located in the remote mobile communication terminal 100, and the control section 203 fails to respond to a request for data and the vacant storage capacity of a memory issued from a remote mobile terminal.

D. Masanobu, JP 2001-184240

The Examiner in the Office Action states that the following section in AAPA disclose "a management apparatus for memory capacity, comprising: a data capacity management means, a transmission judging means that judges in response to a request for data and a vacant storage capacity of a memory issued from a remote terminal and a transmitting means for the purpose of providing capacity control mechanism between two devices."

As the third conventional technology, Japanese Patent Application Laid-Open No. 2001-184240 discloses a memory capacity management apparatus and a method thereof, and a recording medium thereof. In this patent application, in case that a transmitting side terminal transmits data to a receiving side terminal, the transmitting side terminal judges whether the receiving side terminal has memory capacity being more than the amount of data to be transmitted or not. And when the memory capacity in the receiving side terminal is less than the amount of data to be transmitted, the transmitting side terminal makes the receiving side terminal secure the memory capacity being more than the amount of data to be transmitted, by making the receiving side

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terminal transmit some storing data to the transmitting side terminal.
(Emphasis added.) (Page 5, 15-27.)

Generally stated, the invention of Masanobu is directed towards storage capacity management equipment which secures empty capacity in an amount greater than data transmitted to the memory of a receiving side terminal.

[0004] The purpose of this invention is to offer the storage capacity management equipment, storage capacity management method, and storage which can secure the empty capacity more than the amount of data transmitted to the store of a receiving-side terminal, without imposing time and effort, when transmitting data to a receiving-side terminal from a transmitting-side for terminal.

However, Masanobu fails to teach or suggest a receiving-side terminal requesting data from a transmitting-side terminal. The following passages illustrate the dynamics between the receiving-side terminal 2 and the transmitting-side terminal 1.

Masanobu teaches a server 1 performing data transmission to a client terminal 2:

[0023] Next, actuation in case a server 1 performs data transmission to a client 2 is explained. When performing data transmission from a server 1 to a client 2, CPU12 reads the data which should be transmitted from a store 13, and this read data is transmitted to a client 2 through a network 33 from the empty capacity control module 11. In this case, the empty capacity control module 11 of a server 1 if it judges ... whether the empty capacity of the storage 23 of a client 2 is insufficient to the amount of data which transmits Suspending data transmission, the empty capacity control module 21 makes the data on a store 23 shunt to other stores (here store 13 of a server 1) according to the conditions currently held beforehand, and secures empty capacity more than the amount of data transmitted to a store 23 from a server 1. (Emphasis added.)

Furthermore, with respect to the initiation of the transmission of data from the server 1 to the client 2, Masanobu teaches with respect to its first embodiment, as shown in Drawings 3 and 4:

[0025] When it connects through a network 33, and a server 1 and a client 2 build a confidential relation and perform data transmission from a server 1 to a client 2, the empty capacity control module 11 of a server 1 manages the empty capacity control module 21 of a client 2. In the empty capacity control module 11 of the

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server 1 which performs data transmission, as shown in drawing 3, in step S31, empty capacity detection is performed first. Here, the empty capacity of the storage 23 [is] notified by the empty capacity communications department 112 from the client 2 is incorporated, and the empty capacity of storage 23 is detected. (Emphasis added.)

With respect to the second embodiment, as shown in Drawings 5 and 6, data is “shunt” (transferred) to a removable memory card at the client 2:

[0034] It has, specifically different the memory (not shown), for example, the removable memory card, from the storage 23 with which a client 2 consists of a hard disk drive unit, and this. When the lack of empty capacity of the store of a client 2 occurs in the data transmission to a client 2 from a server 1, with the empty capacity control module 21 The data on a store 23 are made to shunt to the memory card with which the client 2 is equipped according to the conditions currently held beforehand, and empty capacity more than the amount of data transmitted from a server 1 on a store 23 is secured. (Emphasis added.)

With respect to the third embodiment, as shown in Drawings 7 and 8, the client 2 independently sends a “demand” to the server 1 regarding its empty capacity, before the server 1 transmits data.

[0047] The embodiment of this operation differ[s] to the 1st embodiment of above-mentioned operation in that the empty capacity control module 11 of a server 1 and the empty capacity control module 21 of a client 2 control self independently, respectively. With the embodiment of this operation, it specifically sets to the empty capacity control module 21 of a client 2. When it judges whether the empty capacity of storage 23 is insufficient based on the amount of data which received and the empty capacity of storage 23 is insufficient Publish the demand which stores in a store 23 the data which shunted the store 23 to the server 1, and it sets to the empty capacity control module 11 of a server 1. The storing field of the data which shunted according to the demand from a client 2 is created on a store 13, and it controls independently, respectively storing the data which shunted to this field etc. In addition, the configuration in the embodiment of this operation is the same as the 1st embodiment of above-mentioned operation, and this explanation is given using the sign of drawing 1. (Emphasis added.)

Additionally, with respect to the fourth embodiment, as shown in Drawings 9 and 10, it is most like a combination of the second and third embodiments, i.e., the client 2 has memory card like for storing data, and the client 2 independently sends a “demand” to the

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server 1 regarding its empty capacity. See paragraphs [0058]-[0060], *et seq.*

In view of the above cited disclosures, Masanobu fails to teach or suggest the remote mobile terminal (2) requests data from a management apparatus for managing memory capacity (1). The first and second embodiments clearly teach the server 1 initiates the data transfer to the client 2, and the third and fourth embodiments disclose the client 2 transmitting only a memory capacity datum to the server 1 independently and before the server 1 transmits data to the client 2. The client 2 makes no request for data from a network to the server 1.

Masanobu secures the memory capacity in the receiving side terminal 2 only when the transmitting side terminal 1 transmits some data to the receiving side terminal 2, and fails to secure the memory capacity in the receiving side terminal 2 when the receiving side terminal 2 requests data. Furthermore, when the data are transmitted from the transmitting side 1 terminal to the receiving side terminal 2, the transmitting side terminal 1 must always confirm whether the receiving side terminal 2 has vacant capacity for the data to be transmitted. (See Specification at page 7, lines 20-28.)

Therefore, nowhere in AAPA discussion in the Specification regarding Masanobu, or the above-mentioned sections of Masanobu is there any teaching or suggestion of, "a transmission judging means that judges, in response to a request for data and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said requested data is to be transmitted to said remote mobile terminal by comparing said vacant storage capacity of said remote mobile terminal."

E. Applicant's Independent Claims

a. Applicant's Independent Claim 1

Since Masanobu fails to teach or suggest that its client 2 requests data from a network

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to the server 1, Masanobu certainly fails to teach or suggest the client making a request to the server 1 to obtain data from a network.

Therefore, AAPA, further in view of the disclosures of Hiroaki and Masanobu, nor any alleged combination thereof fails to teach or suggest, *“a transmission judging means that judges, in response to a request for data and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said requested data is to be transmitted to said remote mobile terminal by comparing said vacant storage capacity of said remote mobile terminal.”*

b. Applicant's Independent Claim 4

As noted above with respect to Applicant's independent claim 1, AAPA, further in view of the disclosures of Hiroaki and Masanobu, and any alleged combination thereof fails to teach or suggest, *“a transmission judging means that judges, in response to a request for data from said network and a vacant storage capacity of a memory issued from a remote mobile terminal, whether said data requested by each of at least one of said remote mobile terminals is transmitted to each of said at least one of said remote mobile terminals, by comparing said vacant storage capacity of each of said at least one of said remote mobile terminals, which is managed by said data capacity management means, with the amount of said data requested by said data obtaining request transmitting means.”*

2. Applicant's Independent Claim 9

As noted above with respect to Applicant's independent claim 1, AAPA, further in view of the disclosures of Hiroaki and Masanobu, and any alleged combination thereof fails

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to teach or suggest, "judging whether data is to be transmitted to a remote mobile terminal, in response to a request for data from a network and a vacant storage capacity of a memory issued from said remote mobile terminal, by comparing vacant capacity of said remote mobile terminal, which is managed by said management apparatus for memory capacity, with the amount of said data to be transmitted to said remote mobile terminal"

3. Applicant's Independent Claim 12

As noted above with respect to Applicant's independent claim 1, AAPA, further in view of the disclosures of Hiroaki and Masanobu, and any alleged combination thereof fails to teach or suggest, "judging whether said data requested by said remote mobile terminal is transmitted to said remote mobile terminal by comparing vacant capacity of said remote mobile terminal, which is managed by said management server, with the amount of said data requested by said remote mobile terminal."

4. Applicant's Independent Claim 17

As noted above with respect to Applicant's independent claim 1, AAPA, further in view of the disclosures of Hiroaki and Masanobu, and any alleged combination thereof fails to teach or suggest, "judging, in response to a request for data from a network and a vacant storage capacity of a memory issued from a remote mobile terminal, whether data to be transmitted to a remote mobile terminal is transmitted to said remote mobile terminal, by comparing vacant capacity of said remote mobile terminal, which is managed by said management apparatus for memory capacity, with the amount of said data to be transmitted to said remote mobile terminal."

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5. Applicant's Independent Claim 20

As noted above with respect to Applicant's independent claim 1, AAPA, further in view of the disclosures of Hiroaki and Masanobu, and any alleged combination thereof fails to teach or suggest, "*judging whether said data requested by said remote mobile terminal is transmitted to said remote mobile terminal, by comparing vacant capacity of said remote mobile terminal, which is managed by said management server, with the amount of said data requested by said remote mobile terminal.*"

6. Applicant's Independent Claims 25 and 26

As noted above with respect to Applicant's independent claim 1, AAPA, further in view of the disclosures of Hiroaki and Masanobu, and any alleged combination thereof fails to teach or suggest, "*a management server that transmits data, wherein at least one of said plurality of remote mobile terminals requests said management server to obtain data from said network, for transmission to said remote mobile terminal.*"

Therefore, Applicant respectfully requests Examiner to reconsider and withdraw this rejection since AAPA and their corresponding prior art references fails to teach or suggest each and every element and feature of Applicant's claimed invention.

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III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-28, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date:

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CERTIFICATE OF TRANSMISSION

I certify that I transmitted via facsimile to (571) 273-8300 the enclosed Amendment under 37 C.F.R. § 1.116 to Examiner KIM, Art Unit 2185, on July 31, 2006.

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